The Art & Science of Sub-Slab Depressurization (for Radon and VOCs)

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Radon Controls

Radon Reduction Since 1986

GeoEnvironmental Services, Inc.

Professional Geologists & Soil Scientists
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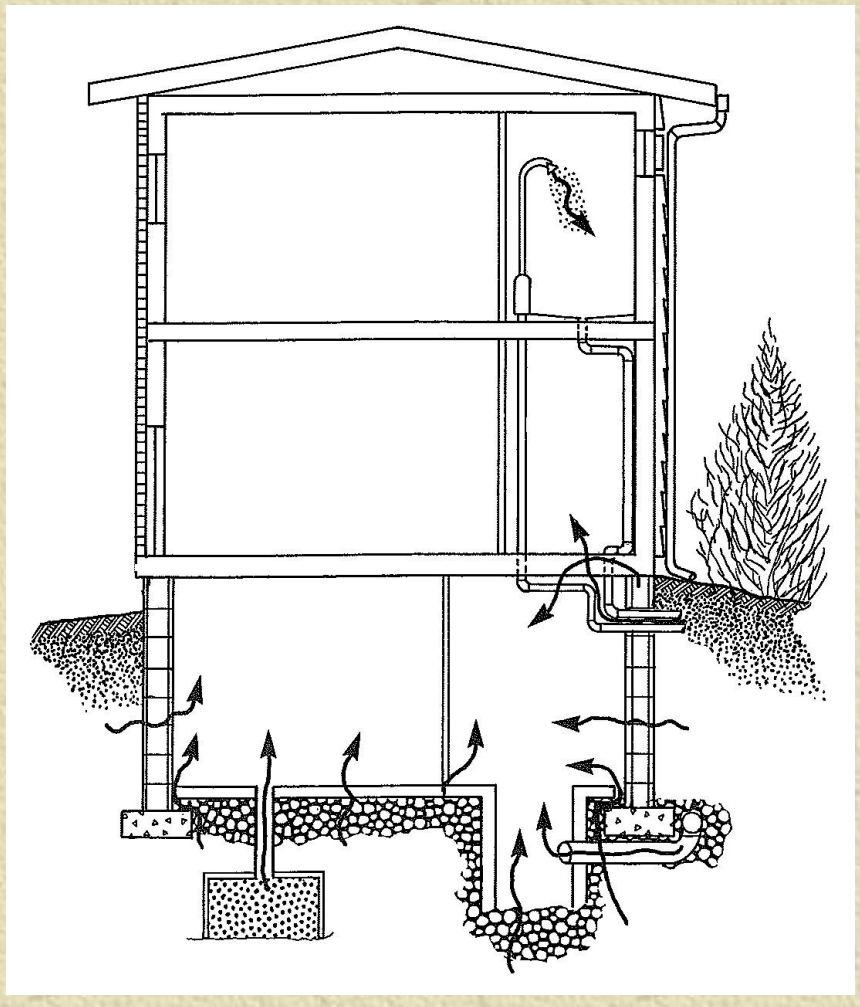
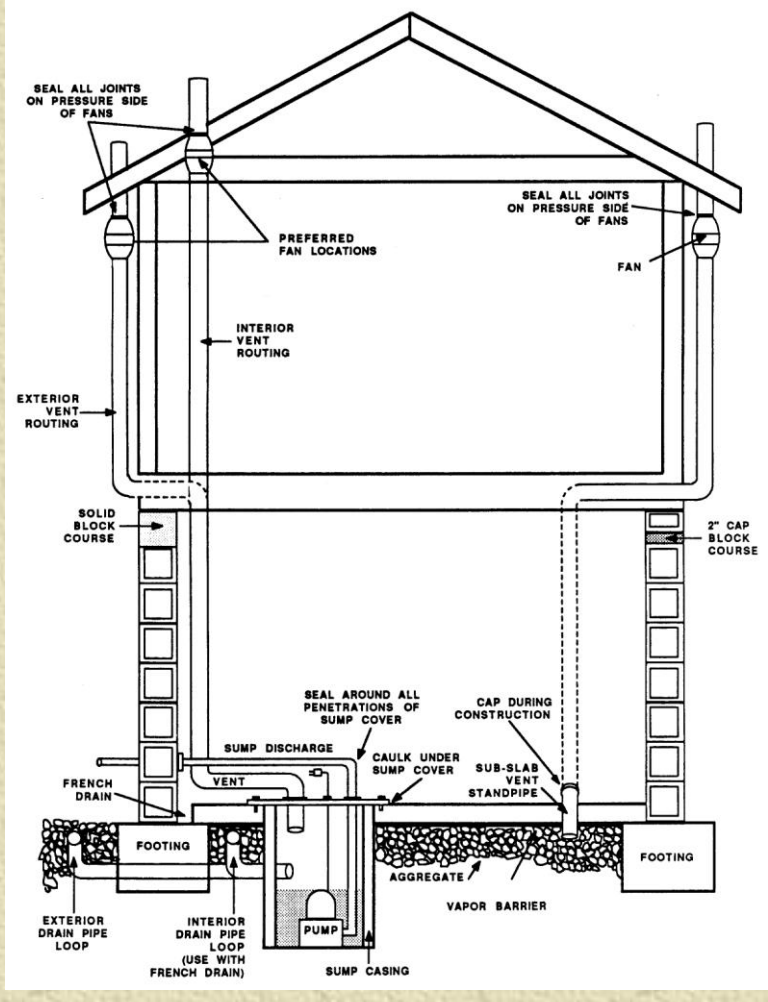
Topics of Discussion

- **Soil Gas Entry -** How does soil gas containing radon or volatile organic compounds permeate the building foundation and enter the building envelope.
- **Active Soil Depressurization (ASD) System Operation** - How an active soil depressurization (ASD) mitigation is designed to work.
- **Building Investigation** - Gather core information by walking through and around the building to identify the extent of the building footprint including all of the characteristics of the foundation.
- **Performing Diagnostics and Designing the ASD System -** Select locations for test suction holes; visually inspecting sub-slab material; determining locations to test Pressure Field Extension (PFE); using a shop vacuum and digital micro manometer to evaluate communication and potential for PFE. Generate the information needed to size your fan and pipes properly, so your system is strong enough to produce the required pressure field without wasting energy or money on oversized systems.
- **Various Applications of ASD** - Sub Slab Depressurization (SSD), Drain Tile Depressurization (DTD), Block Wall Depressurization (BWD), Sub Membrane Depressurization (SMD)
- **Post Mitigation Testing -** Verify integrity of fan mounting seals and all joints in vent piping. Verify pressure field extension. Test for back drafting of all natural draft combustion appliances.

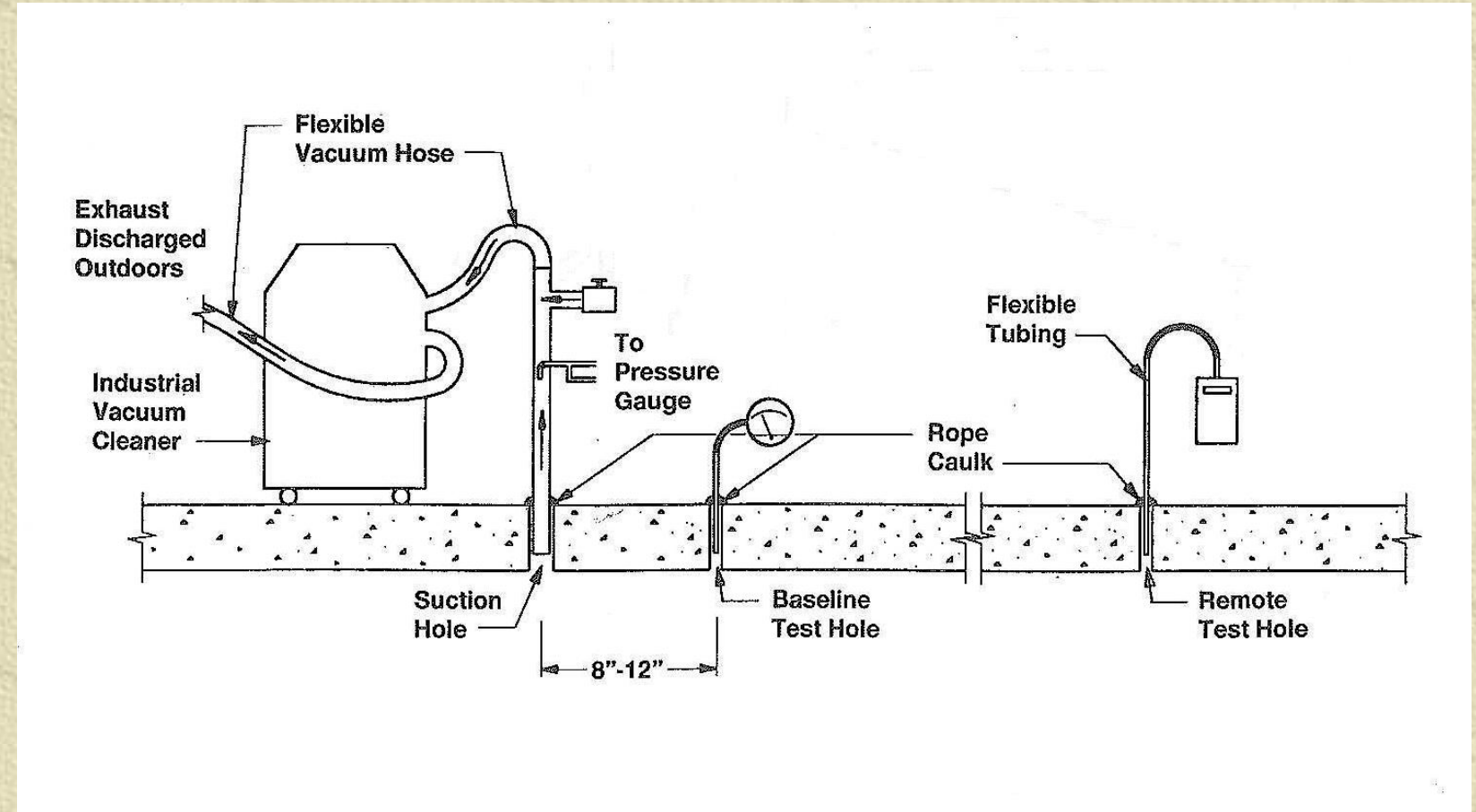
Soil Gas Entry Into Structures



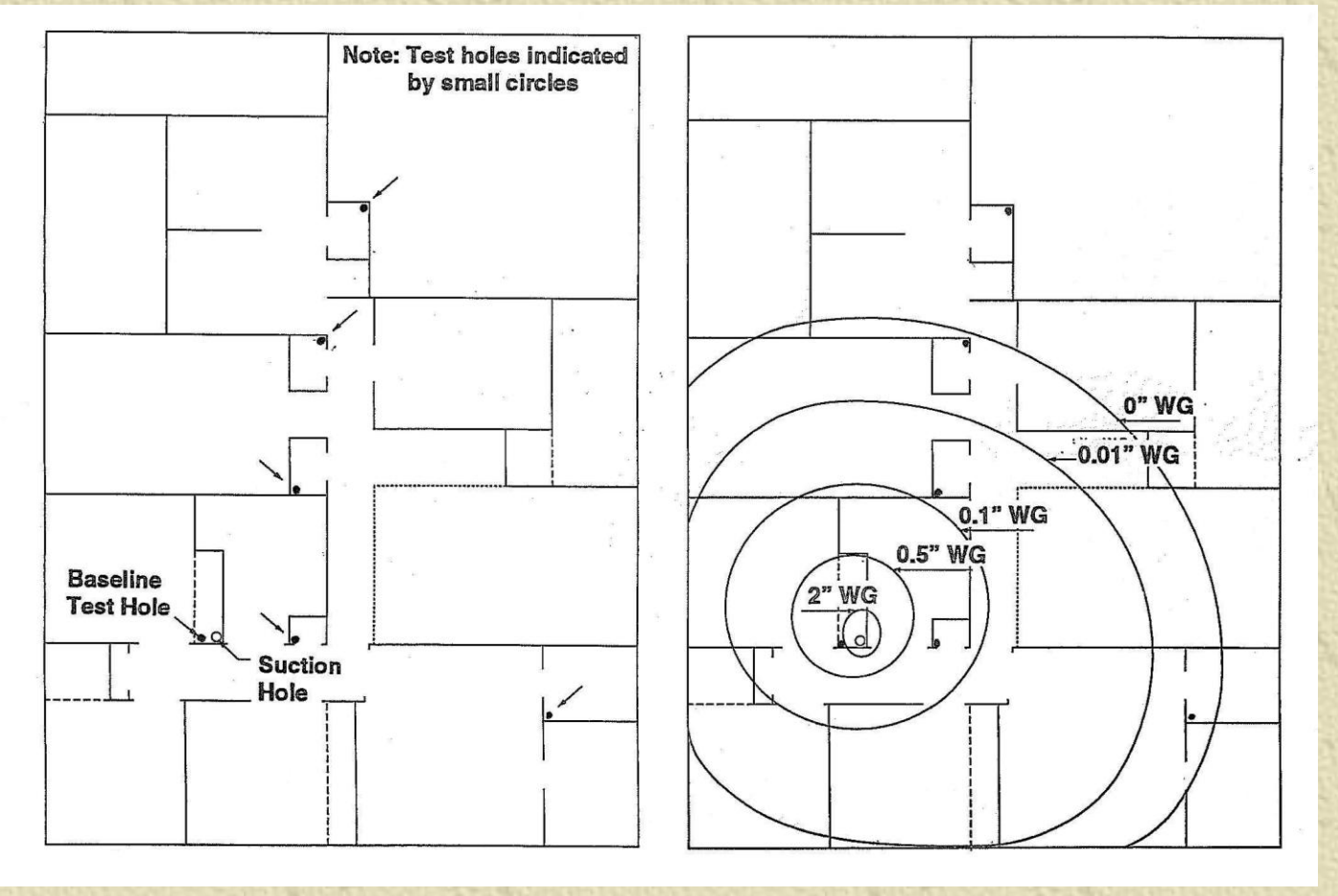
ASD System Operation



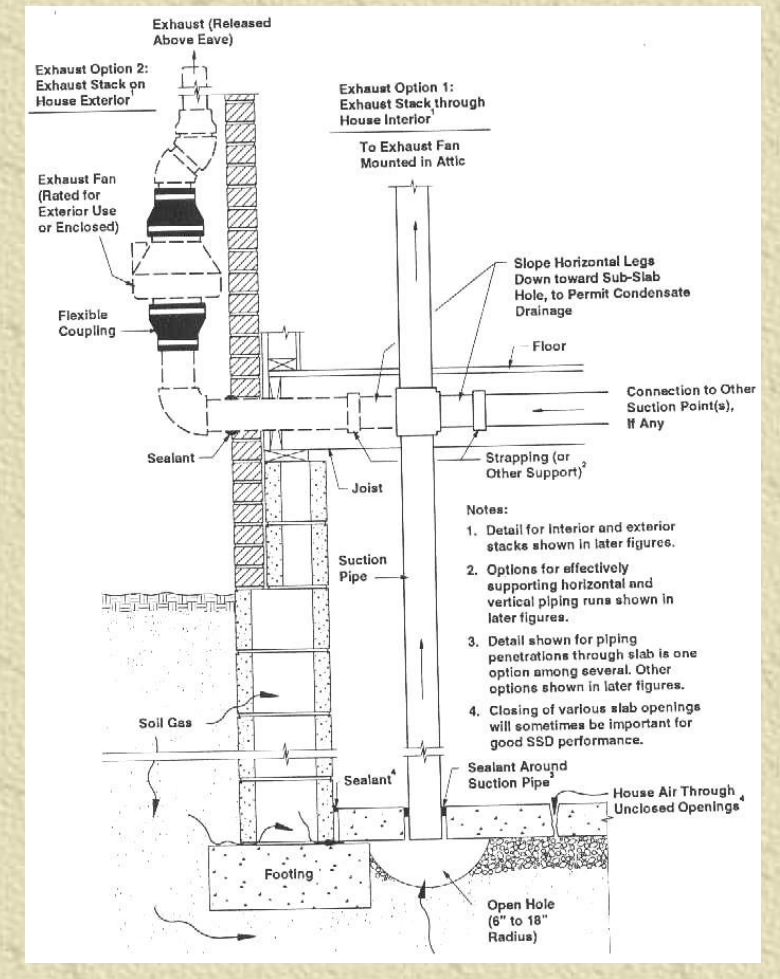
Design & Installation of ASD Systems



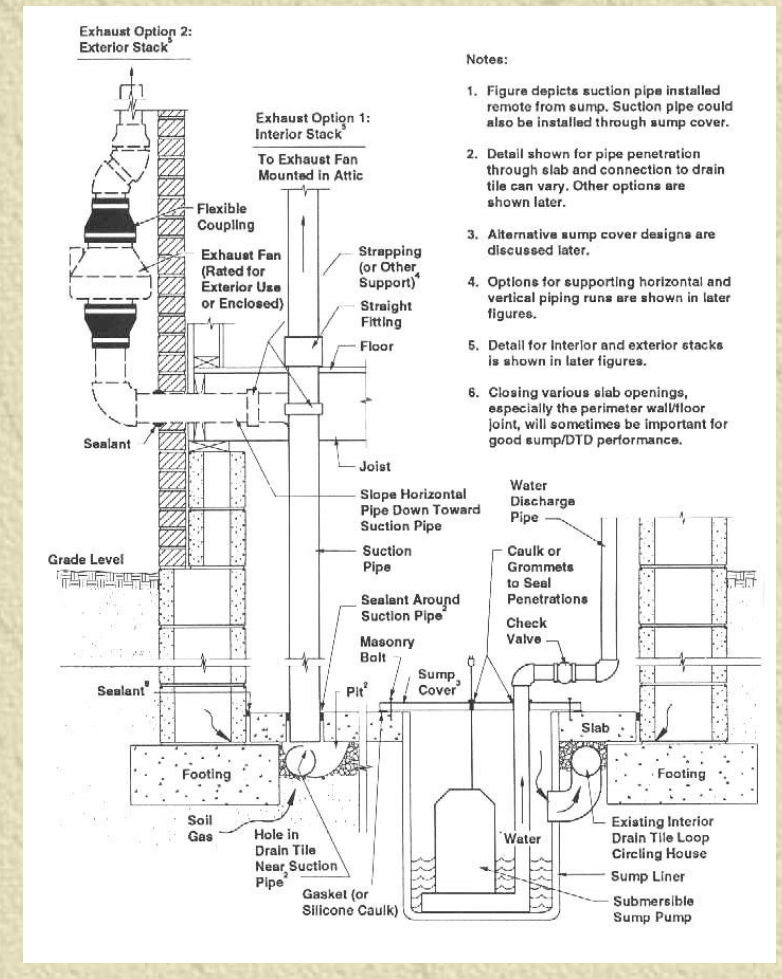
Design & Installation of ASD Systems



Active Soil Depressurization Systems

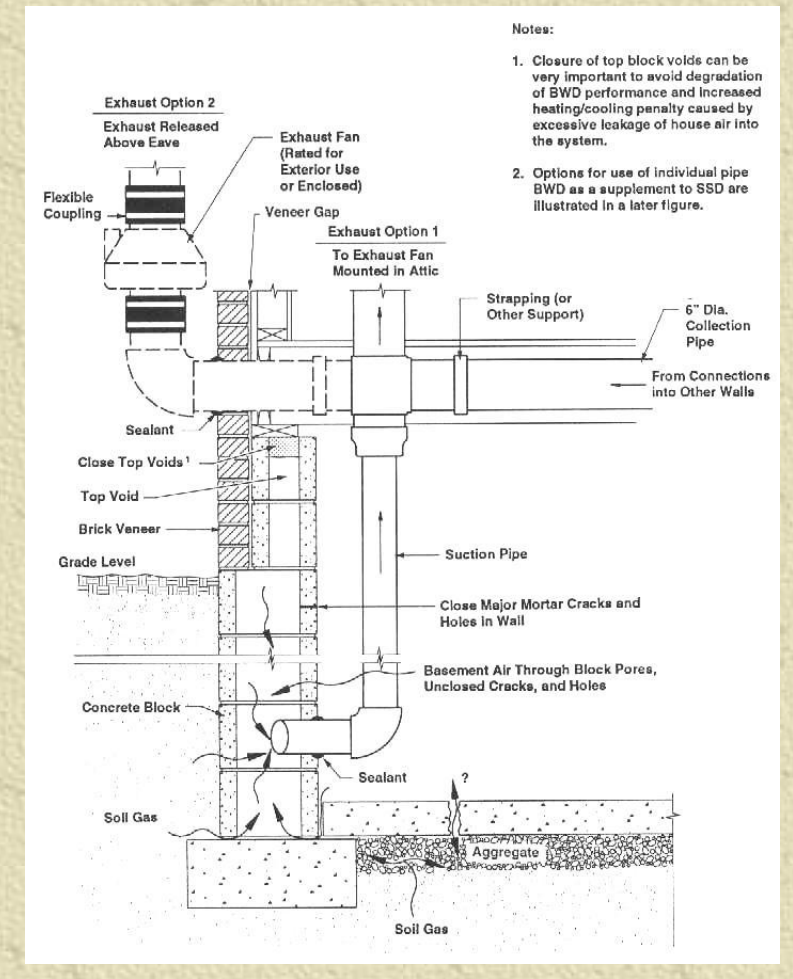


Sub-Slab Depressurization (SSD)

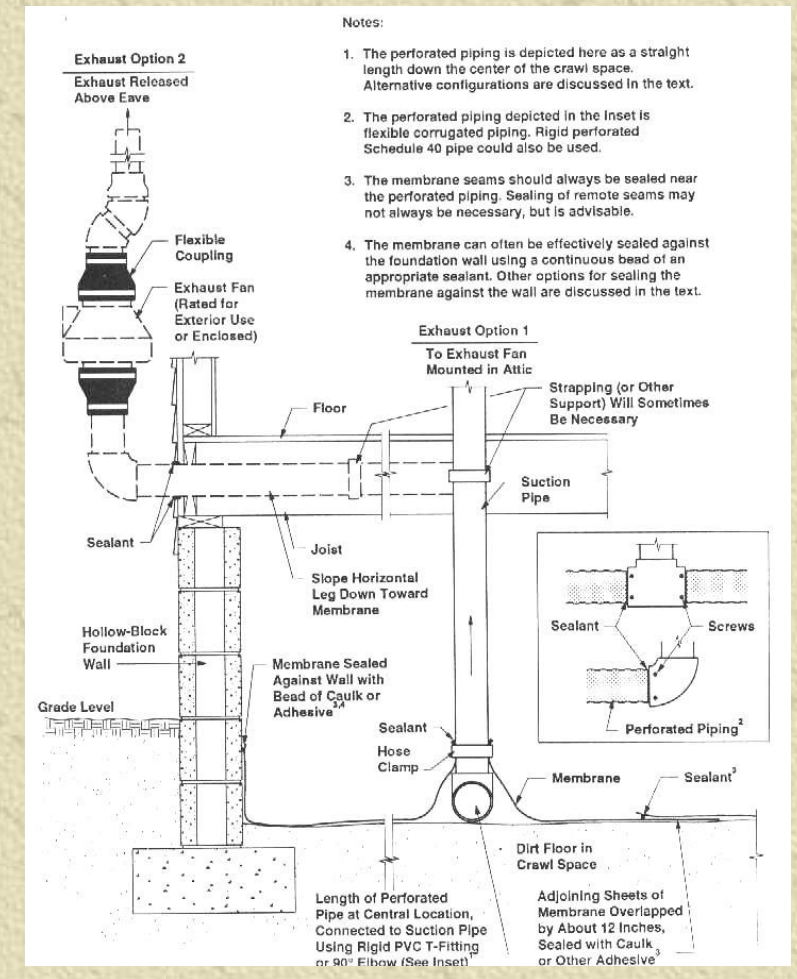


Drain-Tile Depressurization (DTD)

Active Soil Depressurization Systems



Block-Wall Depressurization (BWD)



Sub-Membrane Depressurization (SMD)

Diagnostic Tools